Claims

1-31. (Cancelled)

32. (Previously presented) A method for dynamically directing a wireless repeater, the wireless repeater having a processor, data storage, a mobile station modem, and an antenna, the method comprising:

(a) the processor causing the antenna to sweep over a coverage area through increments and to thereby wirelessly receive forward link signals from a plurality of base stations;

(b) at each increment, the mobile station modem determining a signal-to-noise ratio of the received forward link signals;

(c) the processor storing in the data storage the determined signal-to-noise ratios per increment;

(d) the processor determining which increment has a strongest determined signal-to-noise ratio and responsively causing the antenna to radiate reverse link signals at the determined increment; and

(e) repeating steps (a)-(d) at least once, to dynamically redirect the antenna to radiate at a different increment.

33. (Currently amended) The method of claim 32, wherein the antenna comprises [[a]] directional antenna components, and wherein the processor causes the antenna to sweep over the coverage area through the increments by causing the directional antenna components to move through the increments.

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34. (Previously presented) The method of claim 32, further comprising the processor storing in the data storage for each increment an indication of a PN-offset of forward link signals received at the increment.

35. (Previously presented) The method of claim 34, further comprising the mobile station modem determining the PN-offset at each increment.

36. (Previously presented) The method of claim 32, wherein causing the antenna to radiate signals at the determined increment results in the antenna radiating in a direction of a given sector of a given base station.

37. (Previously presented) A wireless repeater comprising:

a donor antenna;

a processor;

data storage;

a mobile station modem;

wherein the processor is programmed to cause the donor antenna to sweep across a coverage area through increments so as to wirelessly receive forward link signals from a plurality of base stations;

wherein the mobile station modem receives the forward link signals from the donor antenna and identifies characteristics of the received forward link signals;

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wherein the processor is programmed to store in the data storage the identified characteristics per increment and to use the identified characteristics to select a given increment;

wherein the processor is programmed to then cause the donor antenna to radiate amplified reverse link signals at the selected increment.

38. (Previously presented) The wireless repeater of claim 38, wherein characteristics comprise signal-to-noise ratio, and wherein the processor uses the identified characteristics to select the given increment by selecting as the given increment the increment that has a highest signal-to-noise ratio of all of the increments.

39. (Previously presented) The wireless repeater of claim 37, wherein the processor is further programmed to again cause the donor antenna to sweep across the coverage area through the increments, to store new characteristics per increment, to use the new stored characteristics to select a different increment, and to cause the donor antenna to radiate amplified reverse link signals at the different increment.

40. (Previously presented) The wireless repeater of claim 37, wherein the characteristics are selected from the group consisting of PN-offsets of the forward link signals and a signal-to-noise ratio (E_C/I_O) of the forward link signals

41. (Previously presented) The wireless repeater of claim 40, wherein the characteristics comprise PN-offsets and signal-to-noise ratios per PN-offset.

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42. (Previously presented) The wireless repeater of claim 37, wherein the mobile station modem includes a rake receiver that identifies PN-offsets of the forward link signals.

43. (Previously presented) The wireless repeater of claim 37, wherein the processor records in the data storage both PN-offsets and signal-to-noise ratios of the forward link signals at each increment.

44. (Previously presented) The wireless repeater of claim 37, wherein the donor antenna comprises a phased array antenna, and wherein the processor controls direction of the donor antenna through control of phase and amplitude of antenna components.

45. (Previously presented) The wireless repeater of claim 37, wherein the donor antenna is mounted on a stepper motor to direct the donor antenna at the increments.

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